

APPROVED	O G. F.G.
BY	CLASS SUBCLASS
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#4

# Plasmid pCMV .Bx08.gp160

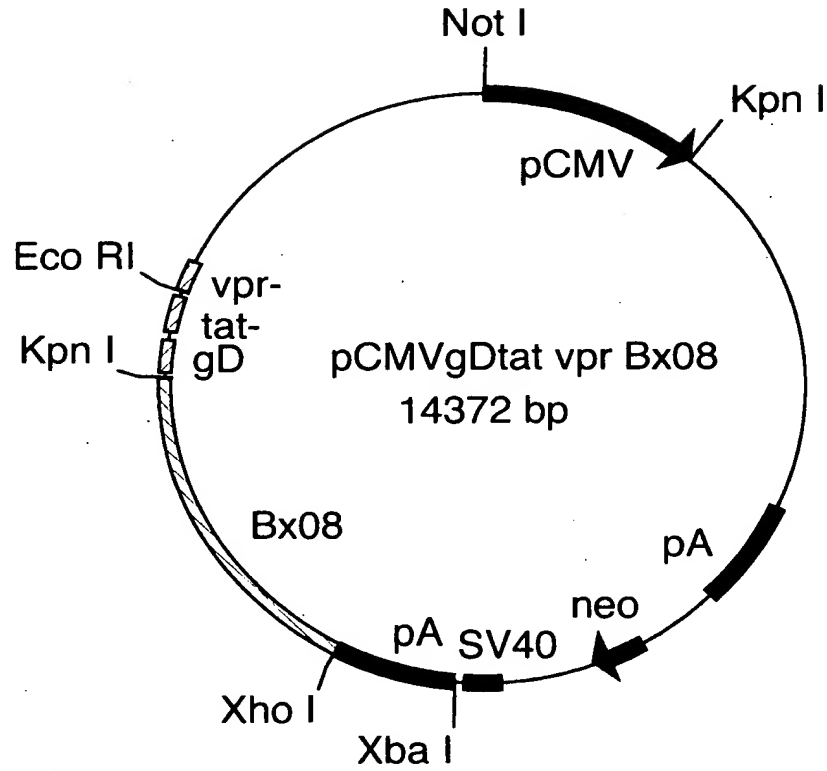


FIG.1

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DNA immunization plasmid pCMV3Bx08.

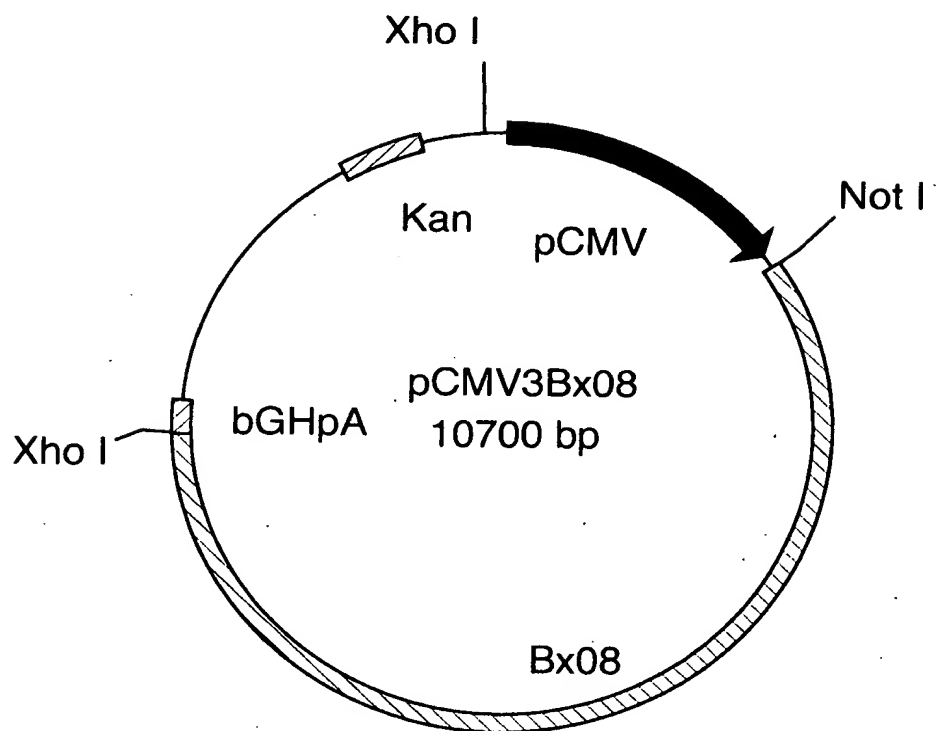


FIG.2

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# Pseudovirion Expression Plasmid p133B1 HIV-1 Bx08

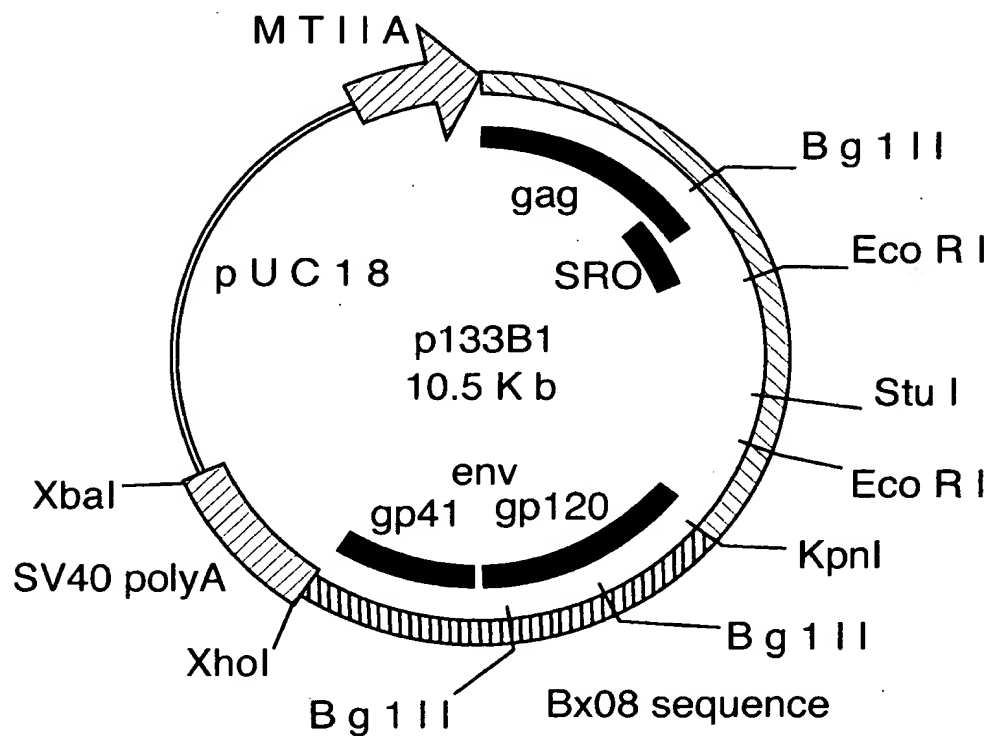


FIG.3



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ALVAC(2)120(BX08)GNP  
(vCP1579)  
(ALVAC XhoI Restriction Map)

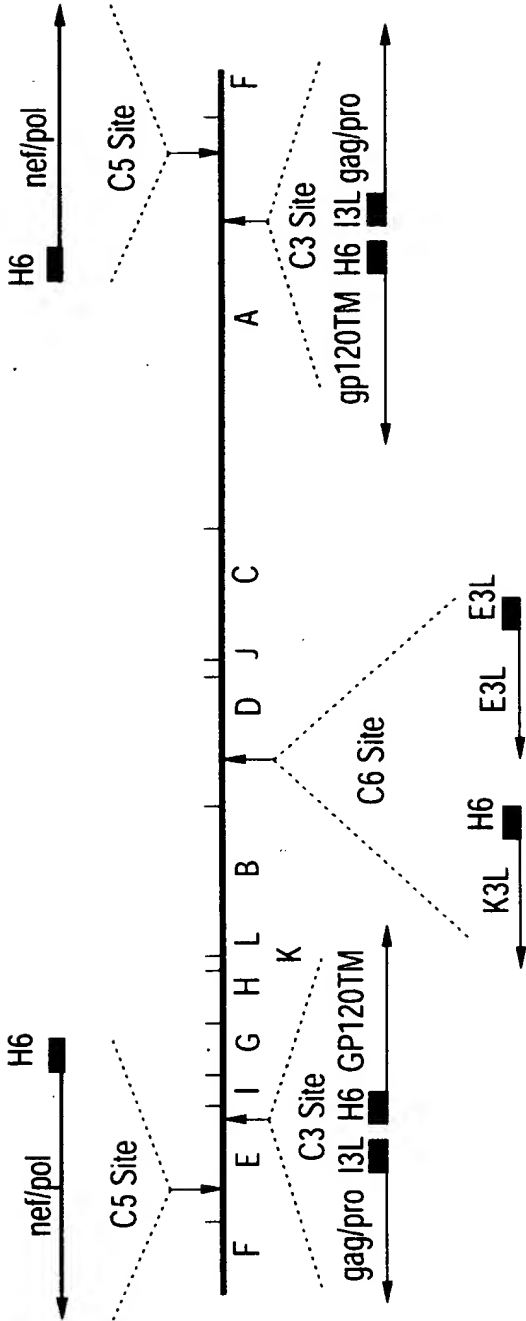


FIG.4



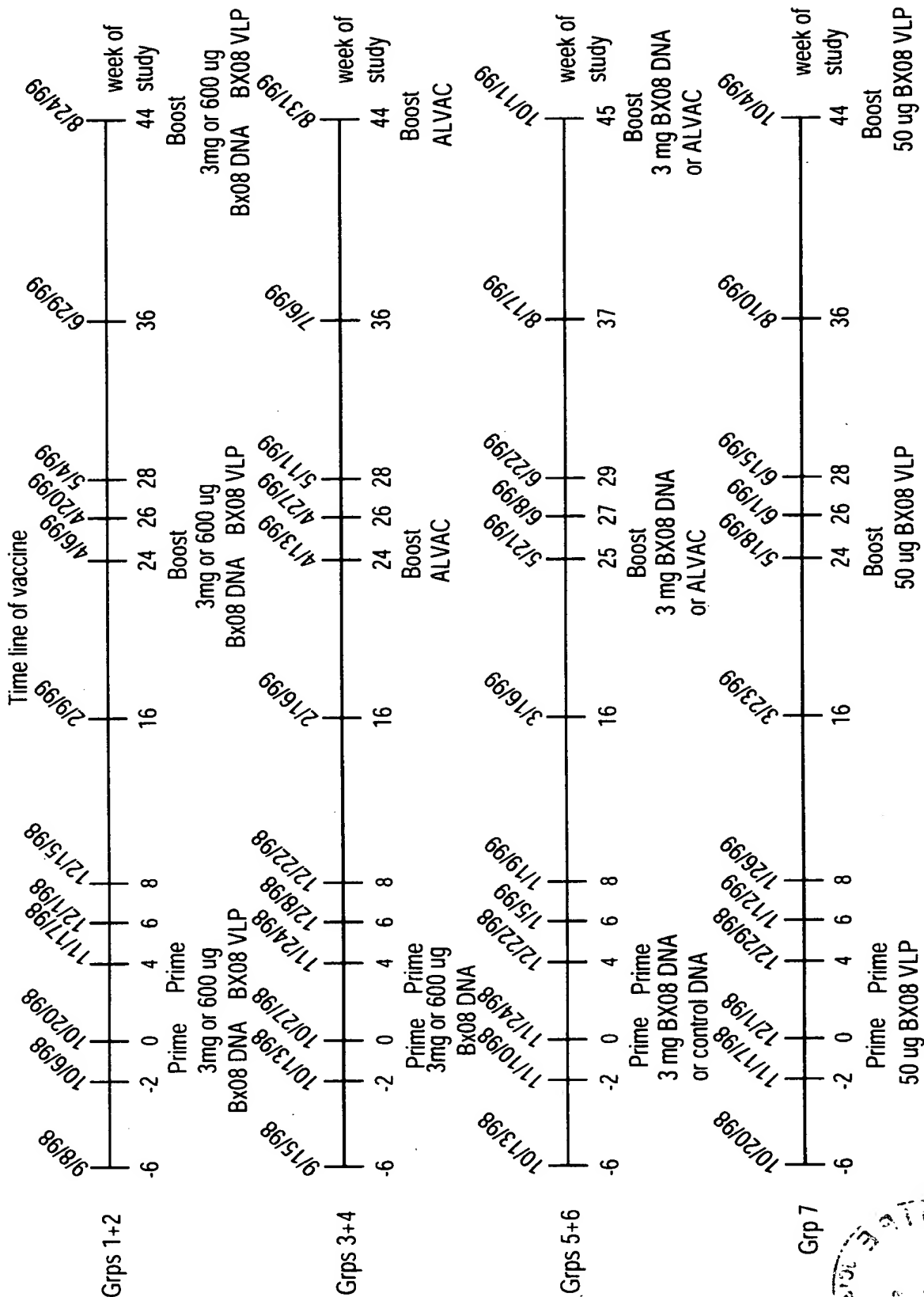


FIG.5A



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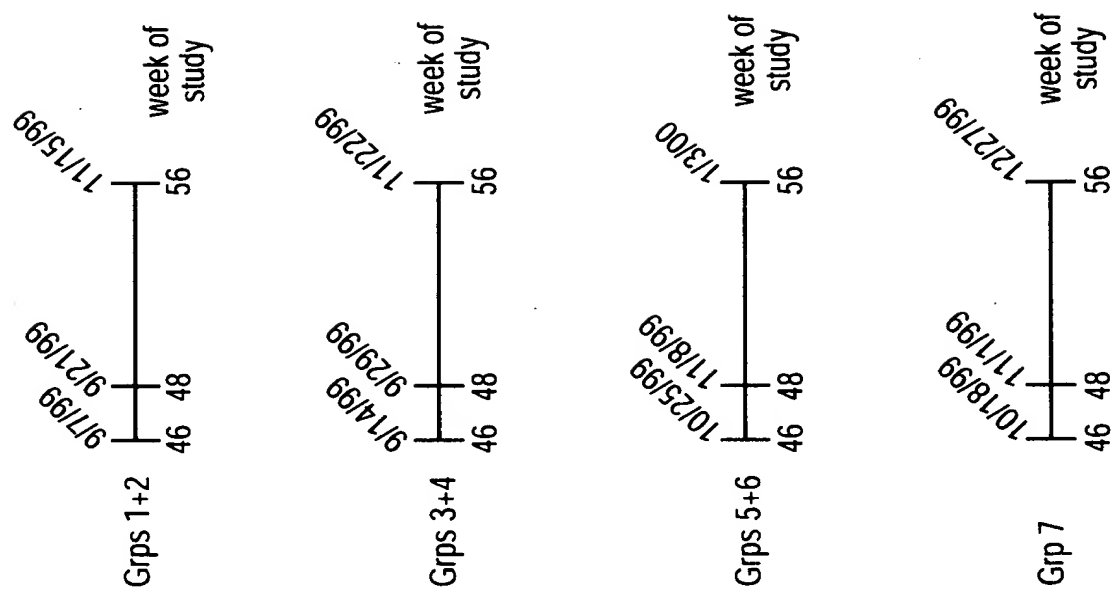


FIG.5B



26 wk macaque serum immunoreactivity to HIV antigens (1:100 diln)

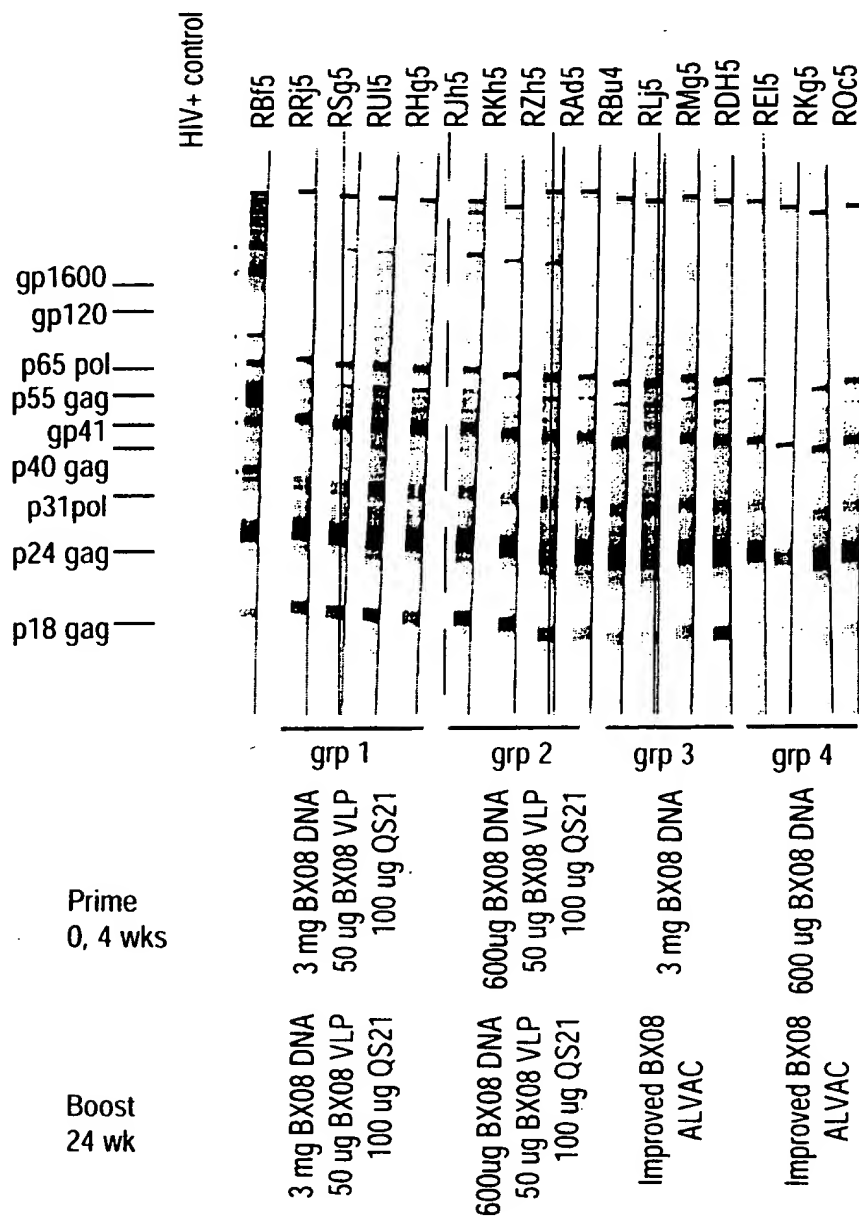


FIG.6A



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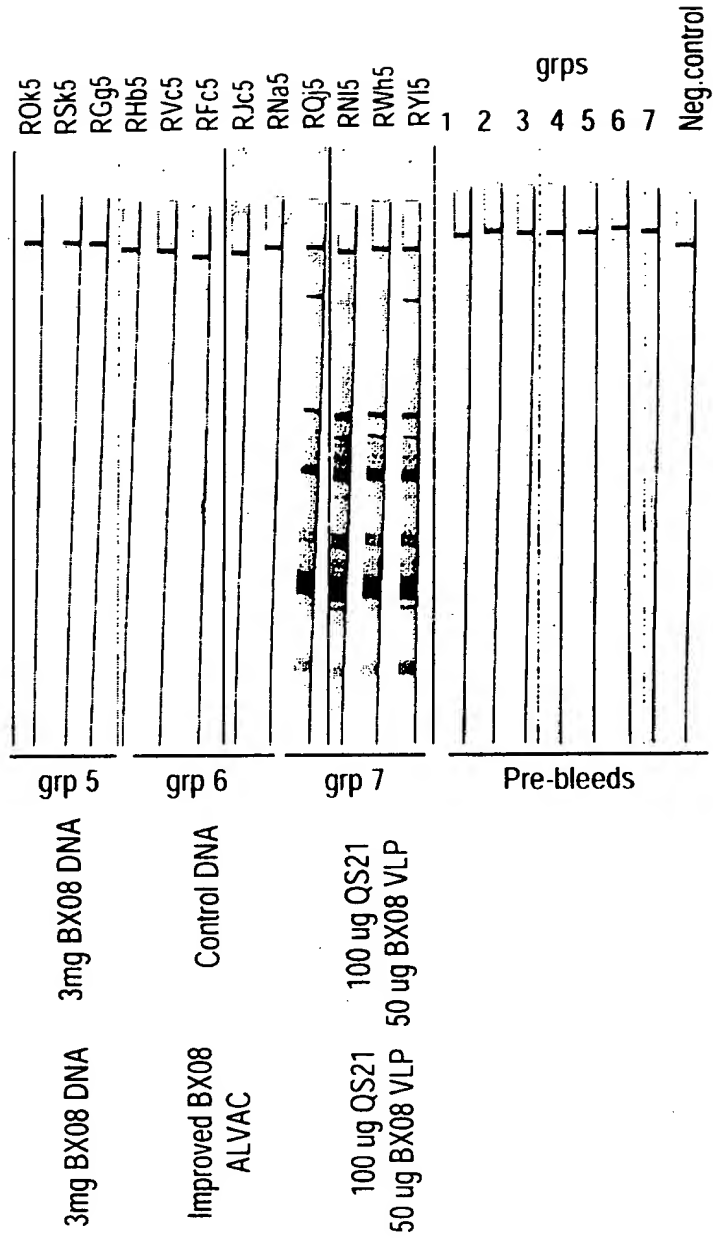


FIG.6B





APPROVED	O. G. FIG.	
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26 wk macaque serum immunoreactivity to HIV antigens (1:1000 diln)

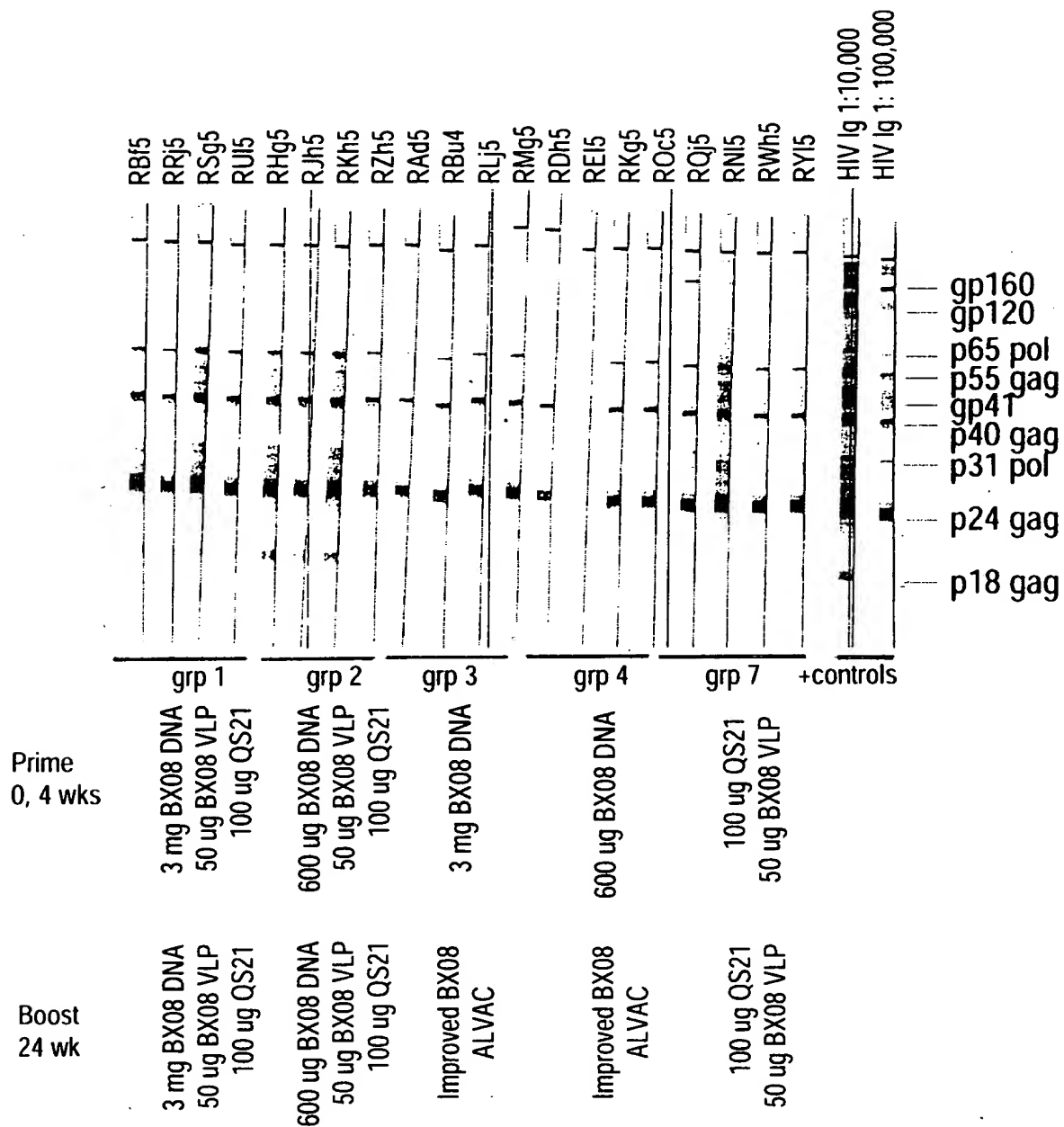


FIG.7



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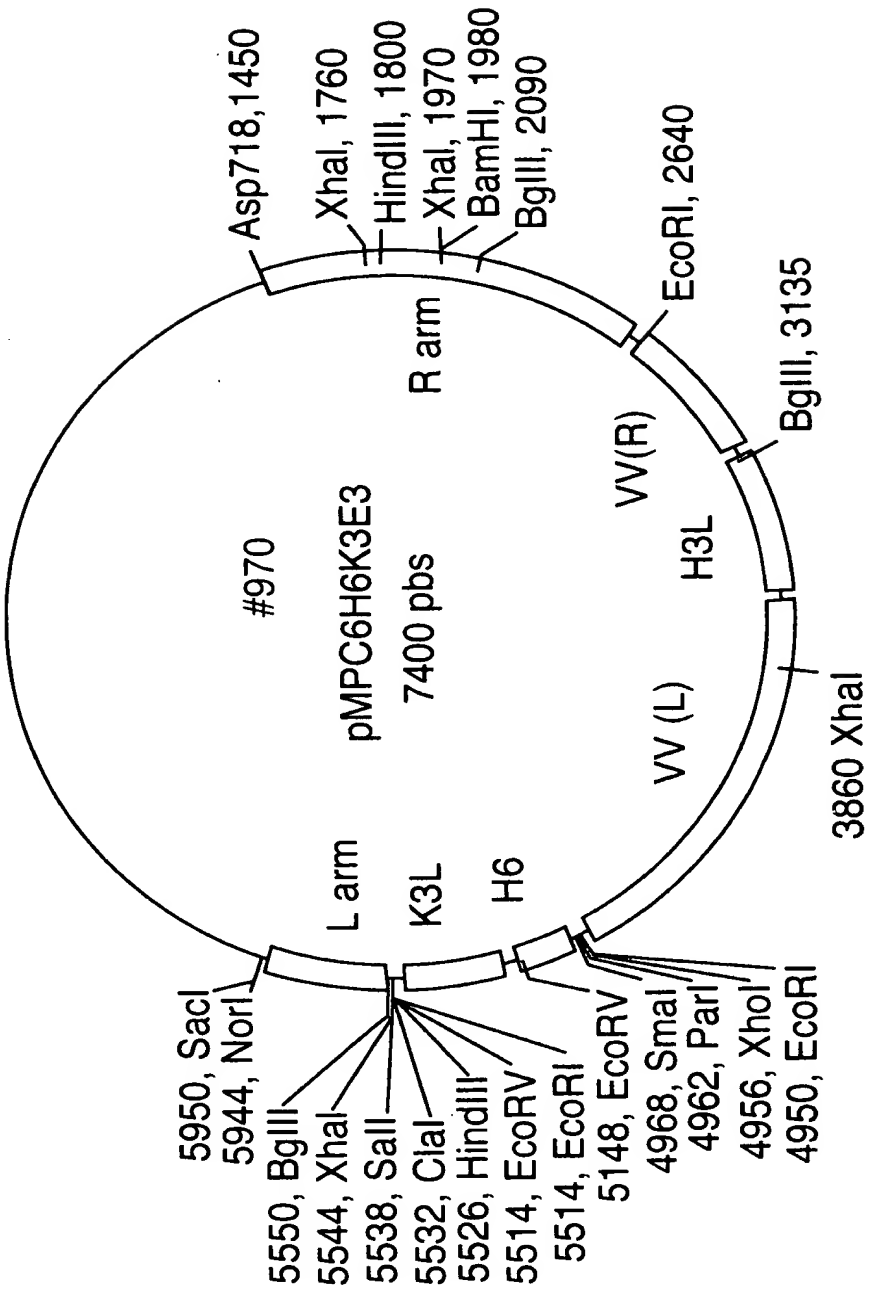


FIG.8



APPROVED	O. G. FIG.	
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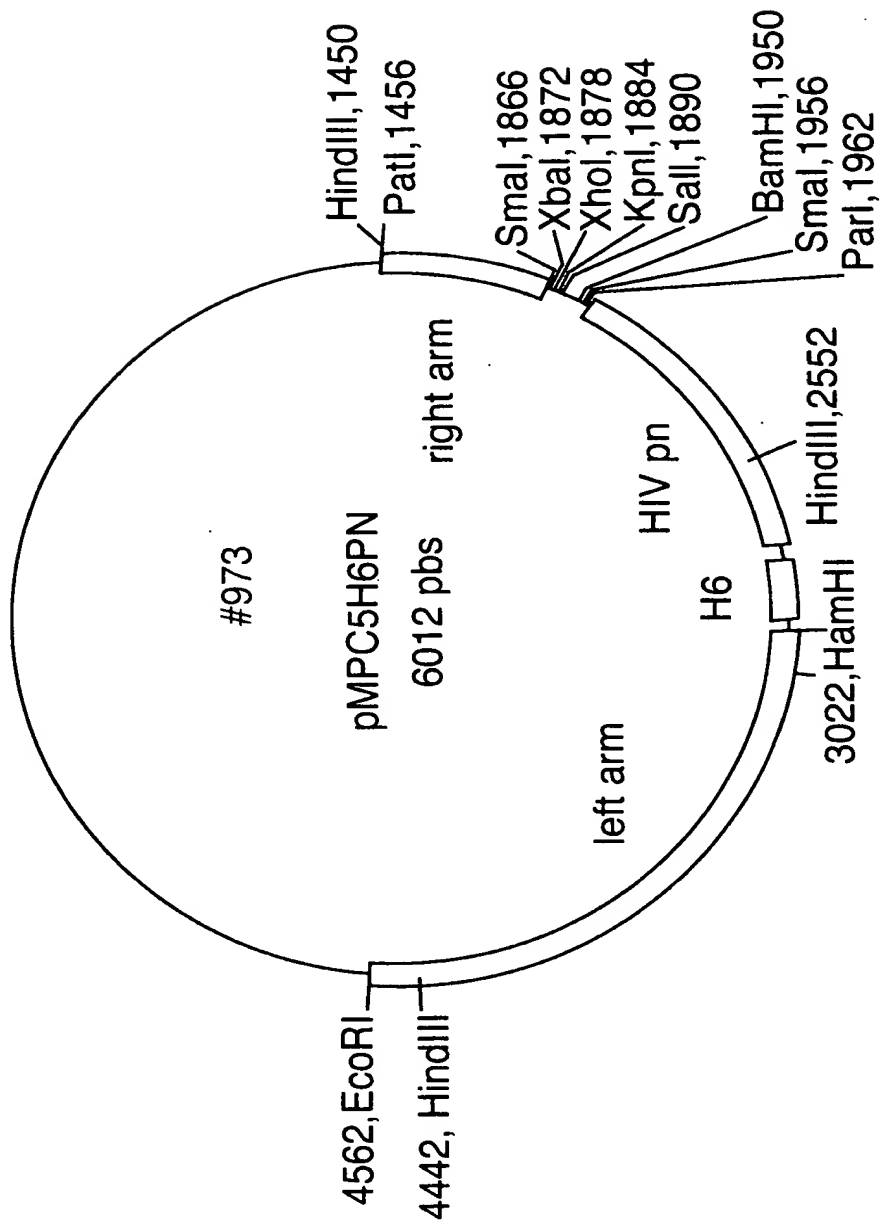


FIG.9

APPROVED	O.G. FIG.	
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Plasmid pHIV76

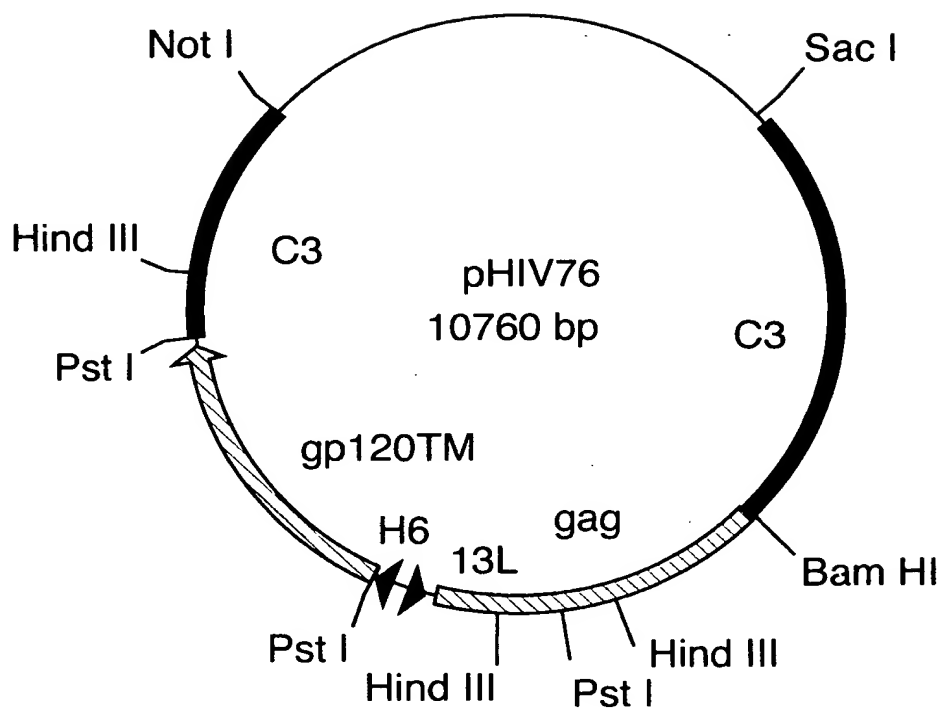


FIG.10



# FIG.11A

vCP1579: H6/HIV Pol/Nef epitope cassette in ALVAC C5 site

```

1  TTTTTHTCAT TATTTAGAAA TTATGCATTT TAGATCTTTA TAAGCGGCGG TGATTAACTA
61  GTCNTAAAAA CCGCGCATCG ATTCTAGACT CGAGGGTACC GGATCTTTAT TAATTAGICA
121 TCAGGCCAGG CGAGAACGAG ACTATCIGCT CGTTAATFAA TTAGGTCGAC GGATCCCCCA
181 ACAAAAACTA ATCAGCTATC GCGGTTAATT AATTAGTTTAT TAGACAAGGT GAAAAACGAA
241 CTATTTGTFAG CTTAATTTAAT TAGAGCTTCT TTAATCTATA CTTAAAAAGT GAAAAATAAAT
301 ACAAAAGGTC TTGAGGGGTTG TGTAAATTTG AAAGCGAGAA ATPAATCATPA ATTATTTCAT
361 TATOGCGATA TCGGTTAAGT TTGTATOGTA ATGOCACTPA CAGAAGAAGC AGAGCTAGAA
421 CTGGCAGAAA ACAGAGAGAT TCTAAAAGAA CCAGTACATG GAGTGTATTA TGAOCCATCA
481 AAAGACTTAA TAGCAGAAAT ACAGAAGCAG GGGCAAGGOC AATGGACATA TCAAATTTAT
541 CAAGAGOCAT TTAAAAATCT GAAAAACAGGA ATGGAGTGGG GATTTGATTC TAGATTAGCA
601 TTTTCATCAG TAGCTAGAGA ATTACATCCT GAATATTTTA AAAATTGTAT GGCAATATTC
661 CAAAGTAGCA TGACAAAAAT CTTAGAGCCT TTTCAGAAAAC AAAATCCAGA CATAGTTATC
721 TATCAATACA TGGATGATTT GTATGTAGGA TCCTGACTTAG AAATAGGGCA GCATAGAACCA
781 AAAANTAGAG AGCTCAGACA ACATCTGTG AGGTCGGGAC TTACAAOCCAT GGTAGGTTTTT
841 CCAGTAACAC CTAAGTACC TTFAAGACCA ATGACTTACA AAGCAGCIGT AGATCTTTCT
901 CACTTTTFAA AAGAAAAAGG AGGTTAGAA GCGCTAATTC ATTCTCAAOG AAGACAAGAT
961 ATTCTTGATT TGIGGATTTA TCATACACAA CGATATTTTC CTGATTCGCA GAATTACACA
1021 CCAGGAOCAG GAGTCAGATA OCCATTAOC TTGGTHTGGT CCTACAAAGT AGTAOCAAAG
1081 ATTGAGACTG TACAGTAAA ATTAAAGCCA GGAATGGATG GOCCAAAAAGT TAAACAAATGG
1141 CCATTGACAG AAGAAAAAAT AAAAGCATTA GTAGAAAATTT GTACAGAGAT GGAAAAAGAA
1201 GCGAAAAATTT CAAAAATTGG GOCCTAATTT TTCTGCAGCC CCGGGGATCC TTTTTATAGC

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# FIG.11B

1261 TAATTAGTCA GGTACCTTIG AGAGTAACAC TTACGCTAAC TCTTTTIGTGT CTCAGAGTAA  
 1321 CTTTCCTTAA TCAATTCOA AACAG

Upstream (right) flanking sequence: 1-266

W H6 promoter: 267-390

HIV pol/nef/pol/nef/pol cassette: 391-1227

Downstream (left) flanking sequence: 1227-1345









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FIG.12C

450	460	470	480	...
* *	* *	* *	* *	...
TGATATOGAA TTCATAAAAA TT A TTG ATG TCT ACA CAT OCT TTT...				
ACTATAGCTT AAGTATTTTT AA T AAC TAC AGA TGT GTA GGA AAA...				
<Q H R C M R K ...				
...				
...	490	500	510	520
...	* *	* *	* *	* *
...	GTA ATT GAC ATC TAT ATA TOC TTT TGT ATA ATC AAC TCT AAT CAC TTT			
...	CAT TAA CTG TAG ATA TAT AGG AAA ACA TAT TAG TTG AGA TTA GIG AAA			
...	Y N V D I Y G K T Y D V R I V K			
...	...k3L...			
540	550	560	570	...
* *	* *	* *	* *	...
AAC TTT TAC AGT TTT OCC TAC CAG TTT ATC OCT ATA TTC AAC...				
TTG AAA ATG TCA AAA GGG ATG GTC AAA TAG GGA TAT AAG TTG...				
<V K V T K G V L K D R Y E V ...				
...				







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DRAFTS: #A#		

FIG.12F

930	940	950	960	970...
* * *	* * *	* * *	* * *	* * *
TGCAGCTCGA	GGAATTCAC	TATATCGACA	TATTTCATTT	GTATACACAT...
ACGTGAGCT	CCTTAAGTIG	ATATAGCTGT	ATAAAGTAAA	CATATGIGTA...
...	980	990	1000	1010
...	* * *	* * *	* * *	* * *
...	AAOCATTACT	AAGGTAGAAT	GTATAGGAG	AGAATGTAAG
...	TGGTAAATGA	TTCGATCTTA	CATATCTTC	TCTACATTCG
				GAACACGGGT
				TGTTGATTC
				CTTGTCGCA
				ATAAACAATG
				1020
				1030
1040	1050	1060	1070	1080...
* * *	* * *	* * *	* * *	* * *
GCAAACATTT	CTAATACATA	ATTCTCTCT	TAATACGCT	TGCAAGTAAT...
CGTTTGATTA	GATTAAGTAT	TAAGAAGACA	ATTATGCAGA	ACGTGCATTA...
...	1090	1100	1110	1120
...	* * *	* * *	* * *	* * *
...	CTATTATAGA	TGCCAAGATA	TCTATATAAT	TATTTTGTAA
...	GATAATATCT	ACGTTCTAT	AGATAATATA	ATAAACAAT
				CTACACAAAT
				TGATACACTA
				1130
				1140



FIG.12G

1150	1160	1170	1180	1190...
* * *	* * *	* * *	* * *	* * *
CTATATAAGT	AGTGAATAA	TTCACTGATTT	TGATATATG	TTCCAACTCT...
GATATATATCA	TCACATTAAT	AAGTACATAA	AGCTATATAC	AAGGTTGAGA...
...	1200	1210	1220	1230
...	* * *	* * *	* * *	* * *
...	GICTTTTIGCA	TGCTCTAGTTT	CGTAATATCT	ATAGCATCTCT
...	CAGAAACACT	ACAGATCAAA	GCATTATAGA	TATCTGTAGGA
...				TTTTTTTATA
				TAAGCGTATA

1260	1270	1280	1290	1300...
* * *	* * *	* * *	* * *	* * *
ATTCCCAAGT	CTTCAGTTCT	ATCTTCTTAA	AAATCTTCAA	CGTATGGAAT...
TAAGGGTICA	GAAGICAAGA	TAGAAGATTT	TTTACAAAGTT	GCATACCTTTA...
...	1310	1320	1330	1340
...	* * *	* * *	* * *	* * *
...	ATAATAATCT	ATTCTTACCTC	TCTCTGATATC	ATTAAATGATA
...	TATTTATAGA	TAAATGCGAG	AAGACTATAG	TAAATTACTAT
...				ATCAAAAAC
				GTCATAGAAG

1370	1380	1390	1400	1410...
* * *	* * *	* * *	* * *	* * *
TTGICAAATTGA	CTATATCTDAA	GAAACGGATA	GCGTCCCTAG...	
ACAGTTAACT	AAGAATAAGT	GATATAGATT	CTTTGCTCTAT	CGCAGGGGATC...



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FIG.12H

...	1420	1430	1440	1450	1460	1470
...	*	*	*	*	*	*
...	GACGAACATAC	TGCCATTAAAT	ATCTCTATTA	TAGCTTCIGG	ACATAATICA	TCTATTATAC
...	CTGCTTGATG	ACGGTAATTA	TACAGATAAT	ATCGAAGAAC	TGTATTAAAT	ACATAATATG

1480	1490	1500	1510	1520...
*	*	*	*	*
CAGAATTAAAT	GGGAACATAAT	CCGTATCTAT	CTAACATAGT	TTTAAAGAAAG...
GTCCTTAATTA	CCCTTGATTA	GGCATAGATA	GATTGATCA	AAATCTTTC...

...	1530	1540	1550	1560	1570	1580
...	*	*	*	*	*	*
...	TCAGAATCTA	AGAOCIGATG	TTTCATATAT	GGTTCATACA	TGAAATGATC	TCTATTGATG
...	AGICTTAGAT	TCTGGACTAC	AAGTATATTA	CCAAGTATGT	ACTTTACTAG	ACATAACTAC

1590	1600	1610	1620	1630...
*	*	*	*	*
ATAGTGACTA	TTTCATCTC	TGAAAATIGG	TAACTCATTC	TATATATGCT...
TATCAGATAT	AAAGTAAAG	ACTTTTAAOC	ATTGAGTAA	ATATATAAGA...

...	1640	1650	1660	1670	1680	1690
...	*	*	*	*	*	*
...	TTCTTGTTG	ATGAAGGATA	GAATATATC	AATAGAATTT	GTACCAACAA	ACTGTTCTCT
...	AAAGGAACAAC	TACTTCTCTAT	CTTATATGAG	TTAICTTTAA	CATGGTGTGT	TGACAAGAGA



FIG.12I

1700	1710	1720	1730	1740...
* * *	* * *	* * *	* * *	* * *
TATGAATCGT ATATCATCAT CIGAAATAAT CATGPAAGC ATACATTFAA...				
ATACITAGCA TATAGTAGTA GACTTTATTA GTACATTIOG TAUGTAAAIT...				
...	1750	1760	1770	1780
...	* * *	* * *	* * *	* * *
...	CAATTACAGA CTIGICTOCT GTTATCAATA TACTATTCIT GIGATAATTT ATIGIGTAGG			
...	GTTAATCICT GAACAGAGGA CAATAGTTAT ATGATAAGAA CACTATTFAA TACACACTOC			

1810	1820	1830	1840	1850...
* * *	* * *	* * *	* * *	* * *
CAAATTIGIC CAAGTICTTT AATTTTGTTA TAGTAGATAT CAAATOCAT...				
GTTTAAACAG GIGCAAGAA TTAAACAAT ATCACTATA GTTTAGGTTA...				
...	1860	1870	1880	1890
...	* * *	* * *	* * *	* * *
...	GGAGCTACAG TTCTTGGCTT AAACAGATAT AGTTTTTICG GAACAAATTC TACAACATTTA			
...	CCTCGATGIC AAGAAOOGAA TTTIGICTATA TCAAAAAGAC CTGTGTTAAG ATGTTGTAAT			

1920	1930	1940	1950	1960...
* * *	* * *	* * *	* * *	* * *
TTTATAAGCA CTTTGGGTAG ATAAGTGGGA TGAATOCCTA TTTTAAITFAA...				
AATATTIOCT GAAACCCATC TATTCACOCCT ACTTAGGAT AAAATTAAIT...				

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FIG.12J

...	1970	1980	1990	2000	2010	2020
...	*	*	*	*	*	*
...	TCCTATOGCA	TTGTCCTOCT	GCAATATATOC	AAAGGCTTTT	GTCATAGTAT	GGCATTCATTT
...	ACGATAGCGT	AACAGGAGCA	CGTTTATAGG	TTTGGGAAAA	CACATATCATA	COGTAAGTAA

2030	2040	2050	2060	2070...
*	*	*	*	*
GICTAGAAAC	GCCTACGAA	TATCIGTGAC	AGATATATC	TTTACAGAAAT...
CAGATCTTTT	OGAGATGCTT	ATAGACACIG	TCATATAGTAG	AAATCTCTTA...

...	2080	2090	2100	2110	2120	2130
...	*	*	*	*	*	*
...	ATACTAGTIOG	CGTTAATAGT	ACTACAATTT	GTAATTTTTTA	ATCTATCTCA	ATTAATAAAT
...	TATGATTCAGC	GCAATATATCA	TGATGTTAAA	CATAAATAAT	TAGATAGAGT	TATTTTTTTA

2140	2150	2160	2170	2180...
*	*	*	*	*
TAATATGTPAT	GATTCATATGT	ATAACTAAAC	TACTAATCTGT	TATTCATTAAC...
ATTATACATA	CTAAGTTACA	TATTCATTTTG	ATGATTCACA	ATAACIATTTG...
...	...	...	...	...





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FIG.12L

2330            2340            2350            2360            2370            ...  
 \*            \*            \*            \*            \*            \*  
 AGG AGA GTT ACT AGG CCC AAC TGA TTC AAT ACG AAA AGA CCA ATC TCT...  
 TOC TCT CAA TGA TOC GGG TTG ACT AAG TTA TGC TTT TCT GGT TAG AGA...  
 <P S N S P G V S E I R F S W D R ...

... 2380            2390            2400            2410  
 ...            \*            \*            \*            \*  
 ... CTT AGT TAT TTG GCA GTA CTC ATT AAT AAT GGT GAC AGG GTT  
 ... GAA TCA ATA AAC CGT CAT GAG TAA TTA TTA CCA CTG TOC CAA  
 ... K T I Q C Y E N I I T V P N  
 ... ~~E3L~~

2420            2430            2440            2450            2460...  
 \*            \*            \*            \*            \*  
 AGC ATC TTT CCA ATC AAT AAT TTT AGC OGG AAT AAC ATC ATC AAA...  
 TOG TAG AAA GGT TAG TTA TTA AAA AAA TOG GCC TTA TTG TAG TAG TTT...  
 <A D K W D I I K K A P I V D D F ...

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FIG.12M

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...      2470      2480      2490      2500
...      *      *      *      *
... AGA CTT ATG ATC CTC TCT CAT TGA TTT TTC GCG GGA TAC ATC
... TCT GAA TAC TAG GAG AGA GGA ACT AAA AAG GCG OCT ATG TAG
... S K H D E R M S K E R S V D
...-----E3L-----

```

```

2510      2520      2530      2540      2550...
*      *      *      *      *
ATC TAT TAT GAC GTC AGC CAT AGC ATC AGC ATC CCG CTT ATC GCG CTC...
TAG ATA ATA CTG CAG TOG GTA TOG TAG TOG GCG GAA TAG GCG GAG...
<D I I V D A M A D A D P K D A E ...
...-----E3L-----

```

```

...      2560      2570      2580      2590
...      *      *      *      *
... GGT TGT CAT AAA CCA ACG AGG AGG AAT ATC GTC GGA GCT GTA
... GCA ACA GTA TTT GGT TGC TOC TOC TTA TAG CAG OCT CGA CAT
... T T M F W R P P I D D S S Y
...-----E3L-----

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FIG.12N

2600	2610	2620	2630	2640...
* * *	* * *	* * *	* * *	* * *
CAC CAT AGC ACT ACG TTG AAG ATC GFA CAG AGC TTT ATT AAC TTC TOG...				
GIG GFA TOG TGA TGC AAC TTC TAG CAT GTC TOG AAA TAA TTG AAG AGC...				
<V M A S R Q L D Y L A K N V E R ...				
<hr/>				
...	2650	2660	2670	2680
...	* * *	* * *	* * *	* * *
... CTT CTC CAT ATT AAG TIG TCT AGT TAG TTG TGC AGC AGT AGC				
... GAA GAG GFA TAA TTC AAC ACA TCA ATC AAC ACG TOG TCA TOG				
... K E M N L Q R T L Q A T A				
...-----E3L				
2690	2700	2710	2720	2730...
* * *	* * *	* * *	* * *	* * *
TOC TTC GAT TOC AAT GTT TTT AAT AGC CGC ACA CAC AAT CTC TGC GTC...				
AGG AAG CTA AGG TTA CAA AAA TTA TOG GCG TGT GTG TTA GAG ACG CAG...				
<G E I G I N K I A A C V I E A D ...				
<hr/>				
...	2740	2750	2760	2770
...	* * *	* * *	* * *	* * *
... AGA ACG CTC GTC AAT ATA GAT CTT AGA CAT TT TTAGAGAGAA				
... TCT TGC GAG CAG TTA TAT CTA GAA TCT GTA AA AATCTCTT				
... S R E D I Y I K S M				
...-----E3L				

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FIG.120

2780 \* \* 2790 \* \* 2800 \* \* 2810 \* \* 2820...  
 \* \* \* \* \* \* \* \* \* \*  
 CTAACACAAC CAGCAATAAA ACTGAACCTA CTTATCATT TTTTATFICA...  
 GATTIGIGTIG GIOGTTATTT TGACTTGGAT GAAATAGTAA AAAAATAAGT...  
 ... 2830 2840 2850 2860 2870 2880  
 ... \* \* \* \* \* \* \* \* \* \*  
 ... TCATOCCTCG GGGTTCGIC GTTCTATOG AATGTAGCIC TGATTAACOC GICATCTATA  
 ... AGTAGGAGAC CAACAAGCAG CAAAGATAGC TTACATOCGAG ACTAATTCGG CAGTAGATAT

2890 \* \* 2900 \* \* 2910 \* \* 2920 \* \* 2930...  
 \* \* \* \* \* \* \* \* \* \*  
 GGTCATCTCG GTTCTGGAGA TTCTGGAGGA GATGGATTAT TATCTGGAG...  
 CCACTAAGAC CAAGACCTCT AAGACCTCCT CTACCTAATA ATAGACCTTC...  
 ... 2940 2950 2960 2970 2980 2990  
 ... \* \* \* \* \* \* \* \* \* \*  
 ... AATCTCIGTT ATTCTCTGT TTTCATGTAT CGATTGCGTT GTAACATTAA GATTGCGAAA  
 ... TTACAGACAA TAAAGGAACA AAAGTACATA GCTAAGCGAA CATTGTAAAT CTAAGCGTTT



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FIG. 12P

3000	3010	3020	3030	3040...
* *	* *	* *	* *	* *
TGCCTCTAAT	TGGGAGGCT	TAAAGIGTIG	TTTGCAATCT	CTACAAGGCT...
AACAGATTTA	AAOCTOOGA	ATTTCACAAC	AAAAGTTAGA	GAUGGCGCA...
...	3050	3060	3070	3080
...	* *	* *	* *	* *
...	GTCTAACTAG	TGGAGGTTCG	TCAGCTGCTC	TAGTTTCAAT
...	CAGATTGATC	ACCTOCAAAC	AGTCGAGGAG	ATCAAACTTA
...				GTAGTAGGCG
				CATCATTAAG

3110	3120	3130	3140	3150...
* *	* *	* *	* *	* *
TACTTTTACA	GTTAGGACAC	GGTGTATGTT	ATTCTCTGTC	GAGAAAGTTA...
ATGAAAATGT	CAATCTGCTG	CCACATTAACA	TAAAGAGCAG	CTCTTGCAAT...
...	3160	3170	3180	3190
...	* *	* *	* *	* *
...	AAATAATGTT	TGTAACCTAC	ATOCCTTTTATT	TTATCTATAT
...	TTTATTTAGCA	ACATTGAGTG	TAGGAATAAA	AATAGATATA
...				ACATAAGATG
				AGGAAAGAAAT

3220	3230	3240	3250	3260...
* *	* *	* *	* *	* *
ATGCATTTTA	TACCGAATPA	GAGATPAGCA	AGGAATCTCT	TTTATTTGATT...
TACGTAAAT	ATGCTTTTAT	CTCTATGCT	TCCTTAAGAA	AAATAACTAA...

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FIG.12Q

... 3270 3280 3290 3300 3310 3320  
 ... \* \* \* \* \*  
 ... AACTAGTCAA ATGAGTATAT ATAATTIGAAA AAGTAAAAATA TAAATCATAT AATAATGAAA  
 ... TTGATCAGIT TACICATATA TATTAACITTT TTTCAITTTAT ATTATAGTATA TTATTTACITTT

3330 3340 3350 3360 3370...  
 \* \* \* \* \*  
 ... GGAACATATCA GTAATAGACA GGAACIGGCA GATTCITTTT CTAATGAAGT...  
 ... GCITTTATAGT CATTTATCIGT OCTTGAOOGT CTAAGAAGAA GATTACTTCA...  
 ... 3380 3390 3400 3410 3420 3430  
 ... \* \* \* \* \*  
 ... AAGTACTGCT AAATCTCCAA AATTAGATAA AAATGATACA GCAATATACAG CTTCATTCAA  
 ... TTCAATGAOGA TTTAGAGGTT TTAATCTATT TTTACTATGTT OGTTTATGTC GAAGTAAAGTT

3440 3450 3460 3470 3480...  
 \* \* \* \* \*  
 ... GCAATTAOCT TTTAATTTTT TCAGACACAC CTTAATTACAA ACTAAGTAAAG...  
 ... GCITTAATGCA AAATTAAAAA AGICIGIGIG GAATAATGTT TGATTCATTC...  
 ... 3490 3500 3510 3520 3530 3540  
 ... \* \* \* \* \*  
 ... TCAGATGATG AGAAAGTAAA TATAAATTTA ACTTATCGGT ATAATATAAT AAAGATTTCAT  
 ... AGICITACTAC TCITTCATTT ATATTTAAAT TGAATAOCCA TATTATATTA TTICTAAGTA

FIG.12R

3550	3560	3570	3580	3590...
* * *	* * *	* * *	* * *	* * *
GATATTAAATA ATTACTTAA CGATGTTAAT AGACTTATTC CATCAACCCC...				
CTATAATTAT TAAATGAATT GCTACAATTA TCTGAATAAG GTAGTTGGG...				
...	3600	3610	3620	3630
...	* * *	* * *	* * *	* * *
...	TTCAAAACCTT TCTGGATTAAT ATAAATAC AGTTAATGAT ATTAAAATAG ATTGTTTAAAG			
...	AAGTTTGGAA AGAOCATATA TATTTTATGG TCAATTACTA TAAATTTTATC TAACAAATTC			

3660	3670	3680	3690	3700...
* * *	* * *	* * *	* * *	* * *
AGATGTAAAT AATTATTGG AGGTAAAGGA TATAAAATTA GTCATCTTT...				
TCTACATTTA TTAATAAAC TCCATTTTCT ATATTTTAAAT CAGATAGAAA...				
...	3710	3720	3730	3740
...	* * *	* * *	* * *	* * *
...	CACATGGAAA TCAATTAOCT AATATTAAATA ATTATGATAG GAATTTTTTA GGATTTTACAG			
...	GCTACCTTTT ACTTAATGGA TTATAATTAT TAATACTATC CTTAATAAAT OCTAAATGTC			

3770	3780	3790	3800	3810...
* * *	* * *	* * *	* * *	* * *
CCTATTATAG TATCAACAAT ACAGGCAGAT CTATGGTTAT GGTAACACAC...				
GACAATATAC ATAGTTTGTG TGTCGGTCTA GATACCAATA CCATTTTGTG...				



FIG.12S

...	3820	3830	3840	3850	3860	3870
...	*	*	*	*	*	*
...	TGTAACGGCA AGCAGCATTC TATGGTAACT GGCTATGTT TAATAGCCAG ATCATTTTAC					
...	ACATTGCOCT TGTGCTAAG ATAACCATICA CCGGATACAA ATTATCGGIC TAGTAAAAATG					

3880	3890	3900	3910	3920...
*	*	*	*	*
TCTATAAACA TTTTAOCACA AATAATAGGA TOCTCTAGAT ATTAAATATT...				
AGATATTTGT AAAATGGTGT TTATTATOCT AGGAGATICTA TAAATTATATA...				

...	3930	3940	3950	3960	3970	3980
...	*	*	*	*	*	*
...	ATATCTAACA ACAACAAAAA AATTTAACA TGTATGGCCA GAAGTATTTT CTACTAATAA					
...	TATAGATTGT TGTGTTTTT TTAAATTGCT ACATAOOGGT CTTCATFAAA GATGATTTATT					

3990	4000	4010	4020	4030...
*	*	*	*	*
AGATAAAGAT AGTCTATCIT ATCTACAAGA TATGAAAGAA GATAATCATT...				
TCTATTICTA TCAGATAGAA TAGAUGTICT ATACTTICTT CTATTAGTAA...				

...	4040	4050	4060	4070	4080	4090
...	*	*	*	*	*	*
...	TAGTAGTAGC TACTAATATG GAAAGAAATG TATACAAAAA OGIGGAAGCT TTTTATATTA					
...	ATCATCATOG ATGATTATAC CTTCCTTTAC ATATGTTTTT GCACCTTIGA AAATATTAATT					

APPROVED	O. G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIG.12T

4100            4110            4120            4130            4140...  
                  \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 ATAGCATATT ACTAGAAGAT TTAAAATCTA GACTTAGTAT AACAAAACAG...  
 TATOGTATPA TATCTCTCTA AATTTTAGAT CIGAATCAT TIGTTTIGIC...  
                  ...            4150            4160            4170            4180            4190            4200  
                  ...            \*            \*            \*            \*            \*            \*            \*            \*  
                  ...            TTAAATGCCA ATATCGATT C TATATTTCAT CATAACAGTA GTACATTAAAT CAGTCAATATA  
                  ...            AATTTAAGGT TATAGCTAAG ATATAAAGTA GTATTIGICAT CAIGTAATTA GTCACTATAT

4210            4220            4230            4240            4250...  
                  \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 CTGAAAGCAT CTACAGACT CACTATGCCA GGAATAAGCA ATATGCCAAT...  
 GACTTTGCCA GATGICIGAG TIGATAAGTT CCTATTTCGT TATAAGGTTA...  
                  ...            4260            4270            4280            4290            4300            4310  
                  ...            \*            \*            \*            \*            \*            \*            \*            \*            \*  
                  ...            TATGICTAAT ATTTTAACIT TAGAACTAAA ACGTCTTACC AATACTAAAA ATAGGATAAG  
                  ...            ATACAGATTA TAAAATHGAA ATCTTGATTT TCCAAGATGG TTATGATTTT TATCTTATGC

4320            4330            4340            4350            4360...  
                  \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 TGATAGGCIG TTAAAAGCTG CAATAAATAG TAAGGATGTA GAAGAATAC...  
 ACTATCOGAC AATTTCOGAC GTTATTATC ATTCTACAT CTCTTTATG...

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIG.12U

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...      4370      4380      4390      4400      4410      4420
...      *      *      *      *      *      *
...      TTGTGTTCTAT ACCITGGGAG GAAAGAACIT TAGAACAACACT TAAGTTTAAAT CAAACTTGTA
...      AAACAAGATA TCGAAGCCIC CTTTCTTGAA ATCTTGTTGA ATTCAAATTA GTTTCACAT

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4430
*      *
TTTATGAAGG TAAC
AAATACTTCC ATGG

```